



**PRESENTING CLINICAL SIGNS**

History: Grade V/VI murmur. Coughing, difficulty breathing. Radiographs showed cardiomegaly and free fluid near liver. Given furosemide injection and oxygen supplementation.

**DATE**

9/22/22

**ECHOCARDIOGRAPHIC FINDINGS**

2D, M-mode, and Doppler study.

**PERFORMED BY:**

Dr. Jessie Evoniuk

**INTERPRETED BY**

Keith Blass, DVM,  
MS, DACVIM  
(Cardiology)

There is moderate to severe left atrial dilation. The mitral valve leaflets are thickened, and there is Doppler evidence of mitral regurgitation present. There is moderate to severe left ventricular dilation. Left ventricular systolic function is hyperdynamic. The aorta and aortic valve appear normal. Right atrial and right ventricular dimensions are normal. The tricuspid valve leaflets are mildly thickened, and a mild jet of tricuspid regurgitation is present. TR velocity is borderline for the presence of very mild pulmonary hypertension. The pulmonary artery and pulmonic valve appear normal. No shunting lesions are visualized. Trivial pericardial effusion is present. No cardiac masses are seen. A small volume of pleural effusion is present. Trace peritoneal effusion is visible.

**PATIENT**

Peanut Smith

LA - 34.5 mm  
LVIDd - 34.0 mm  
LVIDs - 17.0 mm  
FS - 50%  
RA - 23.9 mm  
TR - 2.80 m/s

**SPECIES**

Canine

**ASSESSMENT/RECOMMENDATIONS**

Degenerative mitral and tricuspid valve disease

**BREED**

Lhasa Apso

This examination demonstrates regurgitation of blood across Peanut's mitral and tricuspid valves resulting from degenerative valve disease. Secondary to her mitral regurgitation, Peanut has moderate to severe dilation of her left atrium and left ventricle, though her left ventricular systolic function is well-preserved. Given these changes, it's likely that mainstem bronchial compression is contributing to Peanut's cough, and it would come as no surprise if left-sided congestive heart failure was contributing to her increased respiratory rate/effort. Peanut's tricuspid valve disease is much milder, as she does not have secondary dilation of either of her right heart chambers. As such, no obvious reason for her mild pleural effusion and trace pericardial/peritoneal effusions is appreciated in the image set, though a cardiac cause cannot be ruled out.

**SEX**

FS

**AGE**

8 y

If possible, a sample of pleural effusion should be obtained and submitted for analysis.

Recommended medical therapy based on this exam includes furosemide (10 mg BID, though more frequent dosing may be needed at first), enalapril (2.5 mg BID), and pimobendan (1.25 mg BID).

**WEIGHT**

10.8 lb

A renal/electrolyte profile is recommended in 1 week, as are thoracic radiographs. A recheck echocardiogram is recommended in 6 months.

**HOSPITAL NAME**

State Avenue VC

**REFERRING VET**

Dr. Evoniuk



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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

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